

What is claimed is:

*Sub
A1*

1. A storage service method, comprising:
monitoring a storage capacity of a data
5 accumulation unit of a user terminal device; and
transferring data of the data accumulation
unit to a storage service providing device through
a network such that the free capacity cannot be
smaller than a predetermined value.
10
2. The method according to claim 1, wherein:
said user terminal device detects whether or
not data is deleted or updated; and
when data is deleted or updated, the data
15 before deletion or update is transferred to the
storage service providing device.
3. The method according to claim 1, wherein:
a use frequency of data in the user terminal
20 device is determined; and
data is sequentially transferred to the
storage service providing device in order from
lowest use frequency such that the free capacity of
the data accumulation unit cannot be smaller than
25 the predetermined value.

4. The method according to claim 1, wherein:
policy information defining a process of data
is added to the data; and
when said data is transferred from the data
accumulation unit to the storage service providing
device, the data to be transferred is selected
according to the policy information.
- 10 5. A storage service method, comprising:
determining whether or not data is deleted or
updated in a user terminal device;
in case data is deleted or updated,
transferring the data before deletion or update
15 from the user terminal device to a storage service
providing device; and
storing the transferred data in the storage
service providing device.
- 20 6. A storage service user terminal device,
comprising:
a data accumulation unit accumulating data;
a free capacity monitor unit monitoring a free
capacity of said data accumulation unit; and
25 a data transfer unit transferring the data of

said data accumulation unit to a storage service providing unit through a network such that the free capacity of said data accumulation unit cannot be smaller than a predetermined value based on a monitor result of said free capacity monitor unit.

7. The device according to claim 6, further comprising

a detection unit detecting whether or not data is deleted or updated, wherein

when said detection unit detects that data is deleted or updated, said data transfer unit transfers the data before deletion or update to said storage service providing device.

15

8. The device according to claim 6, further comprising

a use frequency determination unit determining a use frequency of data accumulated in said data accumulation unit, wherein

said data transfer unit sequentially transfers the data in order from lowest use frequency based on a determination result of said use frequency determination unit.

25

9. The device according to claim 6, wherein:
said data accumulation unit stores data with
policy information defining a process of the data
added to the data; and

5 when data is transferred from said data
accumulation unit to said storage service providing
device, data to be transferred is selected
according to the policy information.

10 10. The device according to claim 6, further
comprising

 a data determination unit determining whether
or not data to be used has been transferred to the
storage service providing device, wherein

15 when said data determination unit determines
that the data has been transferred to the storage
service providing device, said data transfer unit
downloads the data from the storage service
providing device.

20

11. The device according to claim 6, further
comprising

 an update date determination unit determining
an update date of data, wherein

25 said data transfer unit selects data of an

earlier update date as transfer data.

12. The device according to claim 6, further comprising

5 a relevant data determination unit determining
whether or not relevant data exists, wherein
 when said relevant data determination
determines that there is relevant data, said data
transfer unit simultaneously transfers other data
10 relevant to the data to said storage service
providing device.

13. The device according to claim 6, wherein
 said data transfer unit comprises an upload
15 unit and a download unit respectively uploading the
data in said data accumulation unit into said
storage service providing device when said free
capacity of said data accumulation unit is close to
the predetermined value and downloading necessary
20 data from said storage service providing device.

14. A storage service providing device,
comprising:

25 a reception unit receiving data to be uploaded
from a user terminal device through a network to

reserve a free capacity such that a free capacity of a data accumulation unit of the user terminal device cannot be smaller than a predetermined value;

- 5 a data accumulation unit storing data;
 a data read unit reading data when the user terminal device requests the data to be downloaded;
and
 a transmission unit downloading the data read
10 from said data accumulation unit into the user terminal device.

15. The device according to claim 14; further comprising:

- 15 a difference generation unit generating a difference between the data received by said reception unit and past data stored in said data accumulation unit; and
 data storage unit storing the difference data
20 generated by said difference generation unit in said data accumulation unit.

16. A computer-readable storage medium storing a *compt., computer readable code*.
storage service program used to direct a computer
25 to perform the process comprising:

monitoring a free capacity of a data accumulation unit of a user terminal device; and transferring data in said data accumulation unit to a storage service providing device through a network such that the free capacity cannot be smaller than a predetermined value.

17. The storage medium according to claim 16, wherein:

10 it is determined whether or not data is deleted or updated in the user terminal device; and when data is deleted or updated, the data before deletion or update is transferred from the user terminal device to the storage service 15 providing device.